

Significant Changes from the 2009 Energy Code to 2015 Energy Code

Effective January 1, 2016

Commercial and Multi-Family

Roof insulation entirely above deck R-25

Metal Building roofs R-19 plus R-11 liner system

Attic R-38

Mass walls R-7.6 continuous insulation

Multi-family mass wall R-9.5 continuous insulation

Metal Building walls R-13 and R-6.5 continuous insulation

Metal framed walls R-13 and R-7.5 continuous insulation

Wood framed walls R-13 plus R-3.8 continuous insulation or R-20

Non swinging opaque doors (overhead doors) R-4.75

Vertical fenestrations shall be per IECC Table C402.4

Air leakage testing (blower door) or visual compliance to IECC sections C402.5.1 thru C402.5.8 is mandatory (air barriers, air leakage of fenestration, doors and access panels, air intakes, exhaust openings, loading docks, vestibules and recessed lighting).

Mechanical systems shall be per IECC Section C403 including equipment performance requirements and commissioning.

Domestic hot water systems shall be per IECC Section C 404 including pipe insulation, maximum allowable pipe length and commissioning.

Electrical power and lighting systems shall be per IECC Section C405 including lighting controls, interior lighting power requirements, exterior lighting, transformers, motors, elevators and escalators.

Required additional efficiency package requirements per IECC Section C406

System commissioning and completion shall be per IECC Section C408.

Existing building requirements regarding additions, alterations, repairs and change of occupancy or use shall be per IECC Chapter 5 (CE)

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Residential

Fenestration U Factor-0.35

Skylight U Factor-0.55

Glazed Fenestration SHGC- 0.25

Ceiling R-value- R38

Wood Frame Wall R-value- R-20 or R-13 plus R-5 continuous insulated sheathing

Mass Wall R-Value- R-8 or R-13 when over half the insulation is on the interior of the mass wall

Eave Baffle- a baffle shall be installed adjacent to soffit or eave vents. Baffles shall maintain an opening equal or greater than the size of the vent. The baffle shall extend over the top of attic insulation.

Air Leakage testing (**blower door**) is mandatory along with visual inspection. The air leakage rate cannot exceed 3 air changes per hour. 2009 IECC allowed up to 7 air changes per hour.

Duct tightness leakage rate at rough-in is 4cfm/100sf with equipment installed or 3cfm/100sf without equipment. Testing at final is 4 cfm/100sf. 2009 IECC allowed 6cfm/100sf with equipment installed and 4cfm/100sf without equipment at rough-in. Testing at final allowed 12cfm/100sf total leakage.

Wood burning fireplaces shall have tight-fitting dampers or doors and outside combustion air.

Heated water circulation systems shall be provided with a circulation pump. The system return pipe shall be a dedicated return line or a cold water supply line.

Insulation for hot water pipe shall be minimum R-3.

The building shall be provided with ventilation that meets the requirements of the IRC or IMC. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J.

Outdoor heated pools and outdoor permanent spas shall be provided with a vapor-retardant cover or other approved vapor-retardant means.

Not less than 75% of the lighting fixtures shall contain high efficacy lamps. Low-voltage lighting is not included.

